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09/855,499	05/16/2001	Patrick Blanc	Q64525	9426

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SUGHRUE MION, PLLC  
2100 PENNSYLVANIA AVENUE, N.W.  
SUITE 800  
WASHINGTON, DC 20037

EXAMINER
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GANTT, ALAN T

ART UNIT	PAPER NUMBER
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2684

DATE MAILED: 11/02/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

09/855,499

**Applicant(s)**

BLANC, PATRICK

**Examiner**

Alan T. Gantt

**Art Unit**

2684

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 15 August 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Response to Arguments***

Applicant's arguments, see page 7, lines 3-12 of Applicant's Appeal Brief filed 8/15/05, with respect to the propriety of the application of a Final Rejection have been fully considered and are persuasive. The Final Rejection has been withdrawn. The instant Office Action is a Non-Final Action relying upon the same prior art but provides a more detailed explanation of the examiner's position with respect to the citations used to reject.

Applicant has primarily argued that:

- (a) The rejection is not supported by evidence.
- (b) The rejection is arbitrary.
- (c) The Salonaho reference fails to teach signaling a reference transmission power and periodically adjusting the transmission power to the reference power at the adjustment period and Salonaho lacks periodically adjusting the transmission power based on the reference transmission power received and signaling an adjustment period along with a reference transmission power and adjusting the power at the signaled periods.

Regarding (a), the supporting evidence is now cited and explained along side the appropriate claim language.

Regarding (b), the rejection that follows will include appropriate explanations so that applicant can see why the examiner considers the cited reference an appropriate reference versus applicant's claim language.

Regarding (c), per the Abstract, Salonaho teaches power correction intervals, calculating target power and correction step limits for each base station, signaling these parameters to each base station, and each base station executes a power correction algorithm (see page 4, lines 4-6 and page 5, lines 6-12 showing that there is a signaling of these parameters). There is at least signaling of these parameters to the base stations. Applicant's claim language calls out for the signaling of reference power along with an adjustment period. The examiner sees the target power as the reference power called out in the claim. Salonaho as part of this signaling or initiation message sends aspects related to adjustments that include a power correction interval length and correction step limits. This power correction interval length is a period of time that adjustments are being made. Applicant seems to be saying that this type adjustment period is different from his adjustment period. That may be true but it does meet the claim language. Therefore, applicant would be advised to add language to his claim limitation that highlights what's unique about his adjustment period. With regards to the claim limitation dealing with the base station periodically adjusting its transmission power to said reference transmission power at said adjustment period, Salonaho provides for an initiation message at each power correction interval and the fact that if the parameters remain unchanged, an internal timer determines the commencement of a new power correction interval when the value exceeds a predetermined threshold. The use of this timer shows a periodic relationship for the adjustments as the correction steps are prompted by commencement of this adjustment period known as the power correction interval. (page 6, lines 15-37). Thus, Salonaho meets the language of claims 1, 6, and 9.

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-12 are rejected under 35 U.S.C. 102(e) as being anticipated by Salonaho.

Regarding claim 1, Salonaho discloses a method and apparatus for power control in a mobile telecommunication system where time is divided into power correction intervals where a target power and correction steps are determined for each base station where the application is pertinent during soft handoffs, i.e. macro-diversity (Abstract and page 1, lines 3-5). This shows a method of adjusting transmission power for base station transmitting in macro-diversity.

Salonaho, thus, meets the following limitations:

wherein a reference transmission power for said adjustment is signaled to each of said base stations together with an adjustment period, (page 4, lines 4-6 [the reference transmission power is the target power level] and page 5, lines 6-12 – Salonaho, as part of this signaling or initiation message sends aspects related to adjustments that include a power correction interval length and correction step limits. This power correction interval length is a period of time that adjustments are being made.) and

wherein each of said base stations periodically adjusts its transmission power to said reference transmission power, at said adjustment period. (page 6, lines 15-37 - Salonaho provides for an initiation message at each power correction interval and the fact that if the parameters remain unchanged, an internal timer determines the commencement of a new power correction interval when the value exceeds a predetermined threshold. The use of this timer shows a periodic relationship for the adjustments as the correction steps are prompted by commencement of this adjustment period known as the power correction interval.)

Regarding claim 2, Salonaho meets the limitation: A method according to claim 1, wherein said periodically-performed adjustments are performed at predetermined instants. (page 6, lines 15-37 – the use of the timer starts the new interval if no new reference power is signaled)

Regarding claim 3, Salonaho meets the limitation: A method according to claim 2, wherein the transmitted information is structured in the form of frames that are numbered using continuous increasing numbering, said adjustment period is expressed as a number  $N$  of frames, and said predetermined instants corresponds to frames numbered  $n$  (modulo  $N$ ), where  $0 \leq n < N$  (page 6, lines 15-37 [power correction interval-inherently, an interval relates to frames])

Regarding claim 4, Salonaho meets the limitation: A method according to claim 1 wherein an updated value for the adjustment period can be signaled. (page 6, lines 21-25 and

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page 7, line 5-21 – the new value of the power correction interval is communicated in an initiation message together with the new target power)

Regarding claim 5, Salonaho meets the limitation: A method according to claim 1, wherein an updated reference transmission power value can be signaled (page 6, lines 21-25 and page 7, line 5-21 – the new value of the power correction interval is communicated in an initiation message together with the new target power)

Regarding claim 6, Salonaho discloses a method and apparatus for power control in a mobile telecommunication system where time is divided into power correction intervals where a target power and correction steps are determined for each base station where the application is pertinent during soft handoffs, i.e. macro-diversity (Abstract and page 1, lines 3-5). This shows a method of adjusting transmission power for base station transmitting in macro-diversity.

Salonaho meets the limitation:

a radio network controller, including, for adjusting transmission powers in base stations transmitting in macro-diversity in a mobile radio communication system, (page 5, lines 23-31 – the power control processing unit [PCPU] is at the radio network controller [Figure 3] and it communicates or transmits the control information to the base stations)

means for signaling a reference transmission power value for said adjustment to each of said base stations, together with an adjustment period. (page 4, lines 4-20 and

page 5, lines 7-31 - the power control processing unit is the means for transmitting the control information to the base stations, including the power correction interval length)

Regarding claim 7, Salonaho meets the limitation: A radio network controller according to claim 6, including means for signaling an updated adjustment period value. (page 6, lines 21-25 and page 7, line 5-21 – the new value of the power correction interval is communicated in an initiation message together with the new target power by the PDPU)

Regarding claim 8, Salonaho meets the limitation: A radio network controller according to claim 6, including means for signaling an updated reference transmission power value. (page 6, lines 21-25 and page 7, line 5-21 – the new value of the power correction interval is communicated in an initiation message together with the new target power by the PDPU)

Regarding claim 9, Salonaho discloses a method and apparatus for power control in a mobile telecommunication system where time is divided into power correction intervals where a target power and correction steps are determined for each base station where the application is pertinent during soft handoffs, i.e. macro-diversity. Thus, Salonaho meets the limitation of a base station, including, for adjusting its transmission power when transmitting in macro-diversity in a mobile radio communication system:

means for receiving a reference transmission power value for said adjustment, as transmitted by a radio network controller together with an adjustment period, (page 4, lines 4-20 and page 5, lines 6-12 – Salonaho, as part of this signaling or initiation



message sends aspects related to adjustments that include a power correction interval length and correction step limits. This power correction interval length is a period of time that adjustments are being made.) and

means for periodically adjusting its transmission power to said reference transmission power value, at said adjustment period. (page 6, lines 15-37 - Salonaho provides for an initiation message at each power correction interval and the fact that if the parameters remain unchanged, an internal timer determines the commencement of a new power correction interval when the value exceeds a predetermined threshold. The use of this timer shows a periodic relationship for the adjustments as the correction steps are prompted by commencement of this adjustment period known as the power correction interval.)

Regarding claim 10, Salonaho meets the limitation: A mobile radio communication system, comprising means for performing a method according to claim 1. (page 3, lines 14-31 and Figure 3)

Regarding claim 11, Salonaho meets the limitation: A method according to claim 1, wherein said periodically-performed adjustments are performed at predetermined instants. (page 6, lines 15-37 – the use of the timer starts the new interval if no new reference power is signaled)

Regarding claim 12, Salonaho meets the limitation: A method according to claim 2, wherein the transmitted information is structured in the form of frames that are numbered using

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continuous increasing numbering, said adjustment period is expressed as a number N of frames, and said predetermined instants corresponds to frames numbered n (modulo N), where  $0 \leq n < N$  (page 6, lines 15-37 [power correction interval-inherently, an interval relates to frames])

***Conclusion***

Any inquiry concerning this communication from the examiner should be addressed to Alan Gantt at telephone number (571) 272-7878. The examiner can normally be reached between 9:30 AM and 6 PM within the Eastern Time Zone. The group FAX number is (571) 273-8300.

Any inquiry of a general nature or relating to this application should be directed to Supervisory Patent Examiner Nay Maung at telephone number (571) 272-7882.

*Alan T. Gantt*

Alan T. Gantt

October 28, 2005

*Nay Maung*  
NAY MAUNG

SUPERVISORY PATENT EXAMINER